



CITRUS MAY FORECAST MATURITY TEST RESULTS

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Florida All Orange Production is Unchanged from April
Florida Non-Valencia Orange Production Unchanged
Florida Valencia Orange Production Unchanged
Florida All Grapefruit Production Down 2 Percent
Florida All Tangerine and Tangelo Down 5 Percent

FORECAST DATES - 2020-2021 SEASON	
June 10, 2021	July 12, 2021

Citrus Production by Type – States and United States

Crop and State	Production ¹		2020-2021 Forecasted Production ¹	
	2018-2019 (1,000 boxes)	2019-2020 (1,000 boxes)	April (1,000 boxes)	May (1,000 boxes)
Non-Valencia Oranges ²				
Florida	30,400	29,650	22,700	22,700
California ³	42,000	43,300	42,000	42,000
Texas ³	2,210	1,150	1,000	1,000
United States.....	74,610	74,100	65,700	65,700
Valencia Oranges				
Florida	41,450	37,750	29,000	29,000
California ³	10,200	10,800	10,000	10,000
Texas ³	290	190	50	50
United States.....	51,940	48,740	39,050	39,050
All Oranges				
Florida	71,850	67,400	51,700	51,700
California ³	52,200	54,100	52,000	52,000
Texas ³	2,500	1,340	1,050	1,050
United States.....	126,550	122,840	104,750	104,750
Grapefruit				
Florida-All	4,510	4,850	4,300	4,200
Red	3,740	4,060	3,600	3,500
White	770	790	700	700
California ^{3,4}	4,200	4,700	4,200	4,200
Texas ³	6,100	4,400	2,400	2,400
United States.....	14,810	13,950	10,900	10,800
Lemons ³				
Arizona.....	1,350	1,800	1,800	1,800
California.....	23,700	25,300	22,000	22,000
United States.....	25,050	27,100	23,800	23,800
Tangerines and Tangelos				
Florida	990	1,020	950	900
California ³	26,500	22,400	23,000	23,000
United States.....	27,490	23,420	23,950	23,900

¹ Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California and Texas-80, Florida-85; lemons-80; and tangerines and mandarins in California-80, Florida-95.

² Early non-Valencia (including Navel) and mid-season non-Valencia varieties in Florida; Navel and miscellaneous varieties in California; Early and mid-season varieties in Texas.

³ Estimates carried forward from April forecast

⁴ Includes pummelos in California.

All Oranges 51.7 Million Boxes

The 2020-2021 Florida all orange forecast released today by the USDA Agricultural Statistics Board is unchanged at 51.7 million boxes. If realized, this will be 23 percent less than last season's revised final production. The forecast consists of 22.7 million boxes of non-Valencia oranges (early, mid-season, and Navel varieties) and 29.0 million boxes of Valencia oranges.

Non-Valencia Oranges 22.7 Million Boxes

The forecast of non-Valencia orange production is finalized at 22.7 million boxes. Harvest is complete for the included varieties. The Navel forecast, included in the non-Valencia portion of the forecast, is 580,000 boxes, 3 percent of the non-Valencia total.

Valencia Oranges 29.0 Million Boxes

The forecast of Valencia orange production is unchanged at 29.0 million boxes. Weekly certifications in April averaged 2.58 million boxes. The Row Count survey conducted April 28-29, 2021 indicated 85 percent of the Valencia rows are harvested. Estimated utilization to May 1, including an allocation for other use, is 24.0 million boxes. Processors were surveyed regarding fruit processed through April 30th and the estimated quantity remaining to be processed to the end of the season. Analysis of estimated utilization to the first of the month, and results of the processors report support holding the Valencia orange forecast.

All Grapefruit 4.20 Million Boxes

The forecast of all grapefruit production is 4.20 million boxes. The white grapefruit forecast is unchanged at 700,000 boxes. The red grapefruit forecast is lowered 100,000 boxes to 3.50 million boxes. Estimated utilization to May 1, with an allocation for non certified use, of white grapefruit is 620,000 boxes and of red grapefruit is 3.48 million boxes. The Row Count survey conducted April 28-29, 2021, indicated harvest is relatively complete for these varieties.

Tangerines and Tangelos 900,000 Boxes

The forecast for tangerines and tangelos is lowered 50,000 boxes to 900,000 boxes. Harvest of tangerines and tangelos is relatively over for the season. Utilization to May 1, with an allocation for non-certified fruit, is 890,000 boxes. This forecast number includes all certified tangerine and tangelo varieties.

Reliability

To assist users in evaluating the reliability of the May 1 Florida production forecasts, the "Root Mean Square Error," a statistical measure based on past performance, is computed. The deviation between the May 1 production forecast and the final estimate is expressed as a percentage of the final estimate. The average of squared percentage deviations for the latest 20-year period is computed. The square root of the average becomes statistically the "Root Mean Square Error." Probability statements can be made concerning expected differences in the current forecast relative to the final end-of-season estimate, assuming that factors affecting this year's forecast are not different from those influencing recent years.

The "Root Mean Square Error" for the May 1 Florida all orange production forecast is 2.1 percent. If you exclude the three abnormal production seasons (three hurricane seasons), the "Root Mean Square Error" is 2.1 percent. This means chances are 2 out of 3 that the current all orange production forecast will not be above or below the final estimates by more than 2.1 percent, including or excluding abnormal seasons. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 3.7 percent including or excluding abnormal seasons.

Changes between the May 1 Florida all orange forecast and the final estimates during the past 20 years have averaged 2.23 million boxes (2.22 million, excluding abnormal seasons), ranging from 0.10 million boxes to 5.60 million boxes including abnormal seasons, (0.50 to 5.60 million boxes excluding abnormal seasons). The May 1 forecast for all oranges has been below the final estimate 11 times, above 9 times, (below 10 times, above 7 times, excluding abnormal seasons). The difference does not imply that the May 1 forecasts this year are likely to understate or overstate final production.

Maturity

Regular bloom fruit samples were collected from groves on established routes April 28-29, 2021 in Florida's five major citrus producing areas and tested April 30, 2021. Only Valencia oranges were collected and tested this month. All comparisons are made to May 1, 2020. Acids are higher and solids (Brix) are lower; ratios are lower. Unfinished juice per box and solids per box are lower.

Unadjusted Maturity Tests – Florida: May 1, 2019-2020 and 2020-2021

[Averages of regular bloom fruit from sample groves. Juice and solids per box are unadjusted and not comparable to juice processing plant test results. Samples were run through an FMC 091B machine using pneumatic pressure. This machine utilizes a 0.025 short strainer and a 1.00-inch orifice tube for the 3 inch cup and a 1.25 inch orifice tube for the 4 inch and 5 inch cups]

Fruit type (number of groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
Valencia Oranges (37-18)										
Oct 1	2.12	1.78	9.26	8.68	4.45	4.93	47.25	49.17	4.37	4.28
Nov 1	1.60	1.50	9.65	8.78	6.13	5.93	50.96	51.23	4.92	4.50
Dec 1	1.37	1.28	9.55	9.21	7.22	7.22	53.23	51.05	5.08	4.71
Jan 1	1.11	1.07	10.23	9.72	9.32	9.15	54.15	53.33	5.53	5.17
Feb 1	0.96	1.04	10.72	10.36	11.36	10.07	54.63	53.56	5.86	5.55
Mar 1	0.83	0.89	10.96	10.71	13.30	12.23	55.35	54.41	6.07	5.84
Apr 1	0.75	0.80	11.41	10.94	15.26	13.89	56.20	52.56	6.42	5.76
May 1	0.62	0.71	11.77	11.29	19.05	16.22	55.82	54.12	6.57	6.12

Unadjusted Maturity Test Averages, by Areas – Florida: May 1, 2019-2020 and 2020-2021

Fruit type (number of groves)	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
Valencia Oranges										
Indian River (19-3)	0.64	(D)	12.01	(D)	18.90	(D)	54.39	(D)	6.55	(D)
Other Areas (18-15)	0.61	0.72	11.52	11.32	19.20	16.08	57.32	53.89	6.60	6.11

(D) Not disclosed due to confidentiality.